UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/765,344	01/27/2004	Robert Luckett Shuler JR.	1149		
Robert L. Shule	7590 08/28/2007 Robert L. Shuler, Jr.			EXAMINER	
5238 Appleblos	ssom Lane		ZHU, RICHARD Z		
Friendswood, TX 77546			ART UNIT	PAPER NUMBER	
			2625		
			MAIL DATE	DELIVERY MODE	
			08/28/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/765,344	SHULER, ROBERT LUCKETT			
		Examiner	Art Unit			
		Richard Z. Zhu	2625			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)	Responsive to communication(s) filed on	_•				
·	· · · · · · · · · · · · · · · · · · ·	action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) 🖂	Claim(s) <u>1-16</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
6)⊠	6)⊠ Claim(s) <u>1-7 and 9-16</u> is/are rejected.					
7)🖾	Claim(s) <u>8</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)	The specification is objected to by the Examine	r.				
10)⊠	10)⊠ The drawing(s) filed on <u>27 January 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority L	under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  Notice of Informal Patent Application						
	Paper No(s)/Mail Date 6) Other:					

Art Unit: 2625

10//00,044

## **DETAILED ACTION**

# Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-2, 5-6, 9, 13 and 15 are rejected under 35 USC 103 (a) over the combined teachings of Cloutier et al. (US 6018397 A) and Wada et al. (US 7221478 B2).

Regarding Claim 1 and 13, Cloutier discloses a system (Fig 1 and see Col 2, Rows 50-53, digital image processing apparatus 10) for evaluating and recommending digital image print size comprising:

a user interview means (Fig 1, Computer 20 and Display Monitor 22 and see Col 3, Rows 25-31. The hardware used to implement applicant's HTML based forms is substantially the equivalence of the structure disclosed in *Cloutier*) for specifying an image file (basic digital image file data 42), a requested print size width and height (initial user selected size/zoom/crop data 48), and an image type (film type information 46);

a first evaluation means (Fig 1, Computer 20 and Display Monitor 22 implementing Quality Determination Function 40) for determining print pixel density of said image at said requested print size (Col 3, Rows 35-50. The process of magnification involves the altering of the number of pixels per unit area or density. By determining the proper magnification for a requested print size, it must also determine the pixel density), and determining acceptable viewing distance based on a predetermined relation of

Art Unit: 2625

viewing distance to print pixel density for each image type (Fig 3 and see Col 4, Rows 1-50; specifically, Rows 1-5 and 24-44);

Page 3

a second evaluation means (Fig 1, Computer 20 and Display Monitor 22 implementing Quality Determination Function 40) for determining if the requested print size alters the aspect ratio of said image by more than a predetermined amount (Col 3, Rows 42-50. A predetermined amount is use as a threshold to determine the level of satisfaction pertaining to printing quality); and

a display means (Fig 1, Computer 20 and Display Monitor 223) for showing results of the evaluations (Col 3, Rows 46-55).

whereby quality issues arising from users attempting too much enlargement are minimized (Col 3, Rows 55-65. When an unacceptable print quality is determined, the system could lock out the order unless the user specified otherwise. Thus, quality issues are minimized when user interaction is minimized due to this function), and delay when requesting such enlargements from a print service is eliminated (By locking out the order and eliminating the time it takes for the user to make a decision, delay is eliminated).

**Cloutier** does not discloses an image reader means for determining the pixel dimensions of an image in said image file.

Wada discloses an image reader means (Fig 3, image data size acquisition unit 22a and see Col 5, Rows 46-49. The hardware and software combined to implement these functions are substantially the equivalence of applicant's means for implementing similar function) for determining the pixel dimensions of an image in said image file (Col 6.

Art Unit: 2625

Page 4

Rows 32-60. Specifically, Row 50 which clear demonstrated Wada's system measures image data size in term of pixel dimension).

Both *Cloutier* and *Wada* are in the field of transmitting photographic images over the network to the print execution portion along with print specifications indicated by the user.

It would've been obvious to one of ordinary skill in the art at the time of the invention to incorporate an image reader means, as suggested by *Wada*, which determines the pixel dimension of an input image instead of requiring the user to input the image size as part of the print specification instruction. The motivation would've been to reduce the burden of customers and increase the convenience of the apparatus by eliminating one field of manual input in the print specification instruction and to reduce.

Therefore it would've been obvious to one of ordinary skill in the art to combine *Cloutier* and *Wada* to obtain the invention set forth in Claims 1 and 13.

Regarding Claim 2, Cloutier discloses a system for evaluating and recommending digital image print size wherein said display means (Col 3, Rows 45-55) produces a conspicuous warning if viewing distance exceeds a predetermined amount (Col 3, Rows 45-65. In this manner, the user is recommended by the device to input another print size);

whereby user is encouraged to request a print size with which user is more likely to be satisfied (Col 3, Rows 45-50 and 55-60).

Regarding Claim 5, Cloutier discloses wherein said display means (Fig 2, Display

Output Image and Warning 52) shows the image scaled to the approximate requested print

size (Col 3, Rows 35-41) whereby the user can obtain an approximate visual representation

Art Unit: 2625

of print quality (the image being display on a display monitor gives the user an approximate visual representation under the current print instructions).

Regarding Claim 6, Cloutier discloses wherein said interview means provides for determining the scaling characteristics of the said display means (Col 3, Rows 31-41, data relating to output device designation and specification data 50 so that a scaling characteristics can be determined and approximate image generated for viewing purpose) whereby the user can adjust the scaled display according to the characteristics of a display device to more accurately approximate requested print size (Col 3, Rows 55-58, the user is given the option to adjust the image quality to satisfaction).

### Regarding Claim 9, Wada discloses:

an order information collection means (Fig 3, order information processing unit 24) for specifying user address and payment information (Fig 5. Although the system of Wada collects customer's name and phone number instead of user address, both phone number and address are species of the same genus user location information, therefore it would've been obvious to one of ordinary skill in the art at the time of the invention to implement the system of Wada using user address whereas the motivation would've been to properly associate the order with the customer who placed the order);

a first communication means for transmitting user print request, file, evaluation, address and payment information to a print service provider (Fig 1, data transmission network 2 and see Col 4, Rows 38-63);

Art Unit: 2625

a second communication means for transmitting the image file being evaluated to a print service provider (Fig 1, data transmission network 2 and see Col 4, Rows 38-63); and

a payment authorization means (Fig 5 and see Col 7, Rows 16-28) for assuring the user payment will be completed if said service provider accepts said print request (Receipt Issue Processing Unit 27 and Receipt Printer 15 generates a receipt assuring the user that the payment had been received and the print request had been accepted).

whereby the results of the evaluation and recommendation are automatically recorded with the user's order and service provider may proceed with confidence in payment and user satisfaction (Fig 5 and see Col 7, Rows 21-29), without having to make refund credits or collect secondary payments if changes are necessary to the print request (As result of recommending satisfactory output quality by quality determination module 40, probability of refund due to dissatisfaction is greatly reduced).

It would've been obvious to one of ordinary skill in the art at the time of the invention to implement the ordering structure of *Wada* into *Cloutier* as the process for implementing order instruction (*Cloutier*, Col 3, Row 1-4). The motivation would've been to allow the user to effectively relay print instruction and customer-defined quality parameters to the printer.

Regarding Claim 15, Wada discloses recording order information including requested print size (Fig 12), file name (Fig 4), shipping address (Fig 5, customer name and telephone number. Telephone name is a species under the genus customer identification just as shipping address. It is well known to associate telephone name with customer

Art Unit: 2625

2005

order then it is also well known to associate customer shipping address with the order to associate a print order with the requesting customer), and user payment information (Fig 3, receipt contain payment information and Fig 12 the amount charged for the print request);

transmitting order information to a print service provider (Fig 1, data transmission network 2 and see Col 4, Rows 38-63); and

transmitting the image file to said print service provider (Fig 1, data transmission network 2 and see Col 4, Rows 38-63).

3. Claims 3-4 and 14 are rejected under 35 USC 103 (a) over the combined teachings of Cloutier et al. (US 6018397 A) and Wada et al. (US 7221478 B2) in view of Ward et al (US 6670964 B1).

Regarding Claim 3, Cloutier discloses wherein said interview means allows requested print size to be omitted (Col 3, Rows 60-65, the order is locked out or omitted) whereby a user who is uncertain how much enlargement to request obtains a useful maximum estimate (Col 3, Rows 48-55 and see Fig 3, Col 4, Rows 24-29. The user obtains a useful maximum estimate when an alarm is displayed to alert the user that the print quality will be unsatisfactory).

Neither *Cloutier* nor *Wada* discloses means for producing a print size recommendation based on a predetermined viewing distance.

Ward discloses a system (Fig 1) with means (Fig 1, Computer System Unit 300) that produces a recommendation of superior output image quality for the purpose of display

illor Number. 10/705,5

Art Unit: 2625

by comparing a plurality of output qualities that are the results of a plurality of scalers (Fig 13-17) and selecting the one with the best output quality (Abstract, Col 2, Rows 25-45).

Ward is in the same field of endeavor as Cloutier for determining and recognizing output images of superior quality.

It would've been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of *Cloutier* and *Wada* with a means for producing an output size recommendation to the user as suggested by *Ward*, base on the print viewing distance and maximum printing magnification/pixel density relation of *Cloutier*. The motivation would've been to enable the user to select the highest quality of all potential print sizes (*Ward*, Col 3, Rows 39-42).

Therefore it would've been obvious to one of ordinary skill in the art to combine *Ward* with *Cloutier* and *Wada* to obtain the invention set forth in Claim 3.

Regarding Claim 4, Cloutier discloses wherein said interview means allows the specification of only one of requested print size width and height (Col 3, Rows 1-5 and 29-31) and said first evaluation means produces a threshold of maximum printing magnification or pixel density that maintains the aspect ratio of the image (Col 3, Rows 35-50) and determines acceptable viewing distance (Fig 3 and Col 4, Rows 1-50).

**Cloutier** does not disclose means for generating print size recommendation whereby the user is relieved of having to make aspect ratio calculations.

Art Unit: 2625

Ward discloses a system (Fig 1) with means (Fig 1, Computer System Unit 300) that produces a recommendation of superior output image quality for the purpose of display by comparing a plurality of output qualities that are the results of a plurality of scalers (Fig 13-17, length and width in pixel dimension) and selecting the one with the best output quality (Abstract, Col 2, Rows 25-45).

It would've been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of *Cloutier* and *Wada* with a means for producing an output size recommendation to the user as suggested by *Ward*, base on the print viewing distance and maximum printing magnification/pixel density relation of *Cloutier*. The motivation would've been to enable the user to select the highest quality of all potential print sizes (*Ward*, Col 3, Rows 39-42) and thereby relived of the burden of having to make aspect ratio calculations.

Regarding Claim 14, Cloutier discloses method for evaluating and recommending digital image print size further comprising

warning (Col 3, Rows 46-55) if requested print size aspect ratio differs from image aspect ratio by more than a predetermined amount (Col 3, Rows 42-50. A predetermined amount is use as a threshold to determine the level of satisfaction pertaining to printing quality); and

warning (Col 3, Rows 46-55) if said acceptable viewing distance is larger than a predetermined amount (Fig 3 and see Col 4, Rows 1-50; specifically, Rows 1-5 and 24-44).

Ward discloses a system (Fig 1) with means (Fig 1, Computer System Unit 300) that produces a recommendation of superior output image quality for the purpose of display

Art Unit: 2625

by comparing a plurality of output qualities that are the results of a plurality of scalers (Fig 13-17) and selecting the one with the best output quality (Abstract, Col 2, Rows 25-45).

Ward is in the same field of endeavor as Cloutier for determining and recognizing output images of superior quality.

It would've been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of *Cloutier* and *Wada* with a means for producing an output size recommendation to the user as suggested by *Ward*, base on the print viewing distance and maximum printing magnification/pixel density relation of *Cloutier*, to recommend a maximum print size as already determined by the relationship between normal print viewing distance and maximum printing magnification illustrated in Fig 3 of *Cloutier*. The motivation would've been to enable the user to select the highest quality of all potential print sizes (*Ward*, Col 3, Rows 39-42).

4. Claim 7 is rejected under 35 USC 103 (a) over the combined teachings of Cloutier et al. (US 6018397 A) and Wada et al. (US 7221478 B2) in view of Gay et al (US 5535320 A).

Cloutier and Wada discloses the invention as set forth in Claim 1 from which Claim7 is dependent upon.

Cloutier and Wada does not disclose wherein said user interview means allows specification of an image type that contains sharp lines and lettering; and said first evaluation means increases the recommended viewing distance by a predetermined amount when the image contains sharp lines and lettering whereby an appropriate recommendation is made for images containing non-photographic design matter.

Gay discloses a means (Fig 1, computer software) for allowing the specification of an image type that contains sharp lines and lettering (Col 2, Rows 48-58, visual designs such as images are distinguished from text elements that contains sharp lines and lettering); and

said means (Fig 1, computer software) increases the recommended text size by a predetermined amount when the image contains sharp lines and lettering (Col 3, Rows 18-29);

whereby an appropriate recommendation is made for images containing non-photographic design matter (the software of Gay safeguard the consistency of visual effect by factoring in the consideration of text in an image relative to the viewing distance, Col 3, Rows 23-29. Specifically, when the image is generated for display on billboards, the text size is increased so that it is visible at predetermined distances).

Gay is in the same field of analyzing input images and determines the proper output parameters to maintain visual consistency.

It would've been obvious to one of ordinary skill in the art at the time of the invention to incorporate the software of *Gay* to be implemented on the computer of *Cloutier* and *Wada* so as to allow the specification of images with sharp lines and lettering and the algorithm of *Gay* can be incorporated to calculate the proper parameters that would result in recommendations with optimal output visual qualities so the quality determination block 40 of *Cloutier*, which assess the best print size base on viewing distances, can properly assess images with lines and lettering. The motivation would've been to include "predetermined"

design parameters may include an intended viewing distance for the visual design, and the relative size and spacing of respective visual design elements and test elements, both with respect to one another and to predetermined positions in the visual design" (*Gay*, Col 1, Rows 50-54) so that "reducing the visual design to a suitable hard-copy form, by relating the visual design to the stored artwork elements, thereby to generate artwork corresponding to the visual design" (*Gay*, Col 2, Rows 14-18) can be arranged.

5. Claims 10-12 and 16 are rejected under 35 USC 103 (a) over the combined teachings of Cloutier et al. (US 6018397 A) and Wada et al. (US 7221478 B2) in view of Rodriguez et al (US 20020135794 A1).

Regarding Claim 10, Cloutier and Wada disclose the user interview means, image reader means, first evaluation means, second evaluation means, display means, order information collection means, first communication means, and second communication means.

Neither reference explicitly discloses implementation of said means is web based.

#### Rodriguez discloses:

Interaction between the user and the web based photograph delivery and notification system is base on Web HTML Browser (Paragraph 0081).

Fetching, processing, evaluation, and display of data (Paragraph 0068) send from the user to the web based photograph delivery and notification system (Paragraph 0128 and

0152) is implemented using XML web page script running within a web browser on the user's computer (Paragraph 0186).

A first communication means is a web based (Fig 6A see Paragraph 0092-0095) common gateway interface (all internet network inherently implements gateway interface) to a database (Fig 6B, Central Server and Mini-Server) on a web host computer for recording said information in combination with email for providing rapid notification to the service provider (Fig 6A and see Paragraphs 0174);

a second communication means is a web based (Fig 6A see Paragraph 0092-0095) file upload means (Paragraph 0095-0096) for storing the image file on a web host computer (Fig 6B, Central Server) and an email means for providing rapid notification to the service provider (Fig 6A and see Paragraphs 0174).

**Rodriguez** is in the field of sending photograph images to a centralized processing center over a network.

It would've been obvious to one of ordinary skill in the art at the time of the invention to implement user interview means as an HTML form in a web page, image reader means as a DHTML web page which uses a web browser to display the file and obtains pixel dimensions using script commands, first evaluation means as a web page script stored on a web host and running within a web browser on the user's computer, second evaluation means as a web page script stored on a web host and running within a web browser on the user's computer, display means as a DHTML web page, order information collection means as an HTML form in a web page, and payment authorization means as a common gateway

reliable web based infra-structure and resources that the service provider can obtain at low cost, using the web structure of *Rodriguez*. The motivation would've been to provide "an improved internet delivery system for digitized photographs" (*Rodriguez*, Paragraph 0031).

Therefore, it would've been obvious to combine *Rodriguez* with *Cloutier* and *Wada* to obtain the invention as set forth in Claim 10.

Regarding Claim 11, Cloutier discloses wherein said user interview means, said first and second evaluation means and said display means are a single frameset (Fig 1-2, Col 3, Rows 1-5 and 25-29. The user has to input the information via prompts display on display monitor 22 whereas the input information is evaluated by quality determination module 40).

whereby the interview means is continuously available for making changes as results are displayed and communication among the interview, evaluation and display means is simplified (Col 3, Rows 46-58. The user is provided with means to continuously update print specifications until preferred level of satisfaction is reached).

Cloutier and Wada does not disclose such means are implemented using HTML.

Rodriguez discloses interaction between the user and the web based photograph delivery and notification system is base on Web HTML Browser (Paragraph 0081).

It would've been obvious to one of ordinary skill in the art at the time of the invention to implement the means in HTML format using the web structure of *Rodriguez*. The

Art Unit: 2625

motivation would've been to provide "an improved internet delivery system for digitized photographs" (*Rodriguez*, Paragraph 0031).

Regarding Claim 12, Wada discloses an order information collection means (Fig 3, order information processing unit 24) for collecting customer information (Fig 5, receipt indicative of said order information collection means had collected customer information) associated with print request and an order precursor page (Fig 12) recording payment information regarding the print request and transmits this to said order information collection means (Fig 7, Hub 2b and Network I/F 37, pertinent information being transmitted from receiving apparatus to print processing section in order to verify the print execution of transmitted images).

Neither *Cloutier* nor *Wada* discloses wherein a target page automatically records coded link information revealing the source of the user's referral to the system for evaluating and recommending digital image print size; an order precursor page retrieves the coded link information and transmits this to said order information collection means; said first communication means transmits coded link information to said database on said web host computer; whereby a print service provider may monitor and optimize the effectiveness of paid referrals.

Rodriguez discloses a target page (Paragraph 0186, implemented by Central Server Task Scheduler) automatically records coded link information revealing the source of the user's referral to the system for evaluating and recommending digital image print size (Paragraph 0187, the central server automatically records the uniform resource locator

of the mini-server and transmit the image data along with attached specification to the central server in TAR format);

an order precursor page retrieves the coded link information and transmits this to a central server (Paragraph 0187, the central server automatically records the uniform resource locator of the mini-server and transmit the image data along with attached specification to the central server in TAR format);

a communication means transmits coded link information to said central server on said web host computer (Paragraph 0187, the mini-server transmits the requested image data to the web host computer on which the central server is located);

It would've been obvious to one of ordinary skill in the art at the time of the invention to implement the process of placing order and transmitting said order to a print service provider in a web-based format as suggested by *Rodriguez* for the system of *Cloutier* and *Wada* so that the print service provider may monitor and optimize the effectiveness of paid referrals. The motivation would've been to provide "an improved internet delivery system for digitized photographs" (*Rodriguez*, Paragraph 0031).

Regarding Claim 16, the combination of *Cloutier* and *Wada* in view of *Rodriguez* is made in Claim 10. The following is a recitation of claim elements disclosed in each reference that is already combined.

Cloutier discloses wherein said interview means allows the specification of only one of requested print size width and height (Col 3, Rows 1-5 and 29-31) and said first evaluation means produces a threshold of maximum printing magnification or pixel density

Application/Control Number: 10/765,344 Page 17

Art Unit: 2625

that maintains the aspect ratio of the image (Col 3, Rows 35-50) and determines acceptable viewing distance (Fig 3 and Col 4, Rows 1-50).

Cloutier discloses interviewing a user to select an image file and specify requested print size width and height (Col 3, Rows 1-5, 29-31, and see 35-50);

evaluating the image file print quality at the requested size (Col 3, Rows 35-50 and see Col 4, Rows 1-5, and 24-44) and displaying the results (Col 3, Rows 46-55);

Wada discloses obtaining order information associated with the specified file from the user (Fig 5 is an illustration of the order information associated with the specified file from the user in the system of Wada);

authorizing payment based on the order information (Col 7, Rows 16-28); and recording the order (Receipt Issue Processing Unit 27 and Receipt Printer 15 generates a receipt assuring the user that the payment had been received and the print request had been accepted) and payment authorization information in the online storage (Fig 12, Order Contents Confirmation Screen is available for the user to see via online storage).

Rodriguez discloses uploading the image file to an online storage (Fig 6A see Paragraph 0092-0095);

# Allowable Subject Matter

6. Claim 8 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 10/765,344 Page 18

Art Unit: 2625

#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 4682243 A, US 4888612 A, US 5511137 A, US 5619738 A pertains to apparatus with methods of analysis that would result in optimal image output quality and US 5871288 A, JP 2001-160103 A discloses transmitting and receiving customer print request over the network.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440 and Richard Z. Zhu whose telephone number is 571-270-1587. The examiners can normally be reached on M-F, 8:00 - 4:30.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or

571-272-1000.

RZ<sup>2</sup> 08/23/2007

Richard Z. Zhu Assistant Examiner Art Unit 2625

SUPERVISORY PATENT EXAMINER